DOCUMENT RESUME

ED 354 358 CE 063 076

TITLE	Business Education Grades 6-12. Program Evaluation.
INSTITUTION	Des Moines Public Schools, IA. Teaching and Learning Div.
PUB DATE	12 Dec 92
NOTE	50p.; For related documents, see CE 063 077-078.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Articulation (Education); *Business Education; Competency Based Education; Distributive Education; *Educational Finance; Educational Planning; Elective Courses; *Enrollment; Enrollment Influences; Intermediate Grades; Marketing; Middle Schools; Program Descriptions; Program Evaluation; *Program Implementation; School Districts; Secondary Education
IDENTIFIERS	Des Moines Public Schools IA

ABSTRACT

Business education programs are offered in 10 middle schools, 5 area high schools, 2 alternative high schools, and at Central Campus in the Des Moines Independent Community School District (Iowa). Major curricular focus at the middle school level is development of keyboarding skill; at the area high school level, the program is broad based to meet student needs. All programs are competency based and articulate with postsecondary institutions. Funds to support the program are provided from the district general fund, instructional support levy, state vocational funds, federal Carl Perkins funds, district budgets, decentralized funds, and student fees. Other significant inputs are provided by local companies through the Applied Economics to ensure relevance of curriculum content, and increased efforts in measuring student achievement. (Appendixes include course descriptions, list of textbooks in current use, equipment inventory, and area high school enrollment by course.) (YLB)

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93-012

AGENDA

BUSINESS EDUCATION
GRADES 6-12

DIVISION OF TEACHING AND LEARNING

PROGRAM EVALUATION
1992

Des Moines Independent Community School District
Des Moines, Iowa 50309-3382

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Focus on Program Evaluation

December 12, 1992

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BUSINESS EDUCATION

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December, 1992

EVALUATION ABSTRACT
BUSINESS EDUCATION
DECEMBER 1992

Context Evaluation

Business Education programs are offered in ten middle schools, five area high schools, two alternative high schools, and at Central Campus. Materials and assistance are also provided for students in special programs such as School-Within-A-School, hospital or homebound, and special education classes. The major curricular focus at the middle school level is the development of keyboarding skill. At the area high school level the Business Education program is broad based to meet the needs of a high percent of the student body. The program offerings at Central Campus are designed to assist students in developing employable skills.

The Business Education program includes courses in business and marketing. The program exceeds the requirements of state and federal vocational guidelines for both business and marketing. All programs are competency based, provide more than the required three sequential units in business and marketing, and articulate with post-secondary institutions.

Input Evaluation

Funds to support the Business Education Program are provided from a variety of sources. They include the district general fund, the instructional support levy, state vocational funds, federal Carl Perkins funds, the district human resources budget, the district staff development budget, the district curriculum development budget, the instructional materials budget, decentralized funds, and student fees collected to pay for common supplies such as ribbons, paper, and computer disks.

Other significant inputs are provided by local companies through the Applied Economics course, the Office Education program, and the marketing program.

Process Evaluation

The process of implementing the Business Education Program includes the development of curriculum, the selection of instructional and resource materials and equipment, the selection of personnel, the motivation and training of personnel, the coordination of the Business Education Program with the other programs being offered in the district, and the evaluation of the results of the program.

Product Evaluation

All Business Education courses are electives except 6th Grade Keyboarding and 7th Grade Keyboarding. Enrollment is therefore a measure of the value students place on the program except in those cases where enrollment must be limited due to space, personnel, or equipment constraints.

Future Planning

The continued development and delivery of quality programs is the focus of future plans for the Business Education Department. Current plans call for an increase in the use of technology, a continuation of efforts to assure the relevancy of the curriculum content, and increased efforts in measuring student achievement.

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DES MOINES INDEPENDENT COMMUNITY SCHOOL DISTRICT

DES MOINES, IOWA

DISTRICT MISSION STATEMENT

"The Des Moines Independent Community School District will provide a quality educational program to a diverse community of students where all are expected to learn."

BUSINESS EDUCATION MISSION STATEMENT

"The Business Education Department assists students in developing skills in human relations, computation, reading, listening, writing, and speaking while acquiring a personal body of knowledge that facilitates thinking and decision making and gives students better control of their futures."

CONTEXT EVALUATION

History

Business Education has always been a part of the curriculum of the Des Moines Public Schools. Historically, the emphasis given to Business Education and the enrollment in business classes have varied indirectly with economic conditions. In times of favorable economic conditions with plentiful job opportunities, emphasis and enrollment have declined and in times of unfavorable economic conditions, emphasis and enrollment have increased. This local phenomena has been consistent with trends at the state and national level.

However, during the unfavorable economic times of the 1980s neither the emphasis given to Business Education nor the enrollment in business classes has increased. There are several reasons for this change in trends. One very significant reason is the decline in the total student population. Other reasons include; an increase in other programs offered by the Des Moines Public Schools which compete for resources and enrollment, and an increased emphasis on preparation for college coupled with the failure of colleges and universities to recognize business courses as appropriate preparation for success in college or university endeavors.

The current framework for the delivery of the Business Education curriculum was established by the school board when they approved the middle school, comprehensive high school, and Central Campus structure for the delivery of the secondary education program. The content of each course offered in the Business Education curriculum has been developed by committees of teachers with the assistance of the Supervisor of Business Education and with direction from advisory committees established for the various areas within Business Education. Decisions regarding specific courses to be offered and the allocation of staff and other resources to the Business Education program are made by personnel at each school site.

Policies, Standards, and Regulations

The development and implementation of the Business Education program must be done in compliance with the policies of the Board of Education, the district administrative policies, and the policies, rules and regulations of each building in which the program is offered.

State standards and Federal guidelines must also be adhered to, particularly in the courses that are vocational in nature and for which state or federal funding is received.

State Legislation

One significant piece of state legislation that relates to Business Education is the "Standards for Vocational Education Act" (S. F. 449). This law was passed in 1989 and was to be implemented by July 1, 1992. This legislation requires school districts, alone or in consortia, to offer programs in at least four of six occupational areas. The six occupational areas are agriculture, business, health care, consumer and family science, industrial education, and marketing. All programs must include at least three sequential units, be competency based, articulated with one or more postsecondary educational opportunity, and include field, laboratory, or on-the-job training. The Des Moines Public Schools offer programs in all six occupational areas. This report will include a description and analysis of the business and marketing programs. The Iowa Department of Education is in the process of developing the rules and regulations to govern the implementation of this legislation.

Federal Legislation

Federal legislation impacting Business Education in the Des Moines Public Schools include the Carl Perkins Vocational Education Act as amended in 1990. This legislation provides for the allocation of federal funds to the various states. Each state is then charged with allocating those funds to local education agencies, both secondary and postsecondary, in accordance with state plans previously approved by the United States Department of Education. The primary focus of Carl Perkins legislation is to assure the participation and success of special populations in vocational education programs. Carl Perkins funds must be used for projects consistent with that primary focus.

Other Policies, Standards and Regulations

Standards of the National Business Education Association and the NCA are also taken into consideration in developing and implementing the Business Education program.

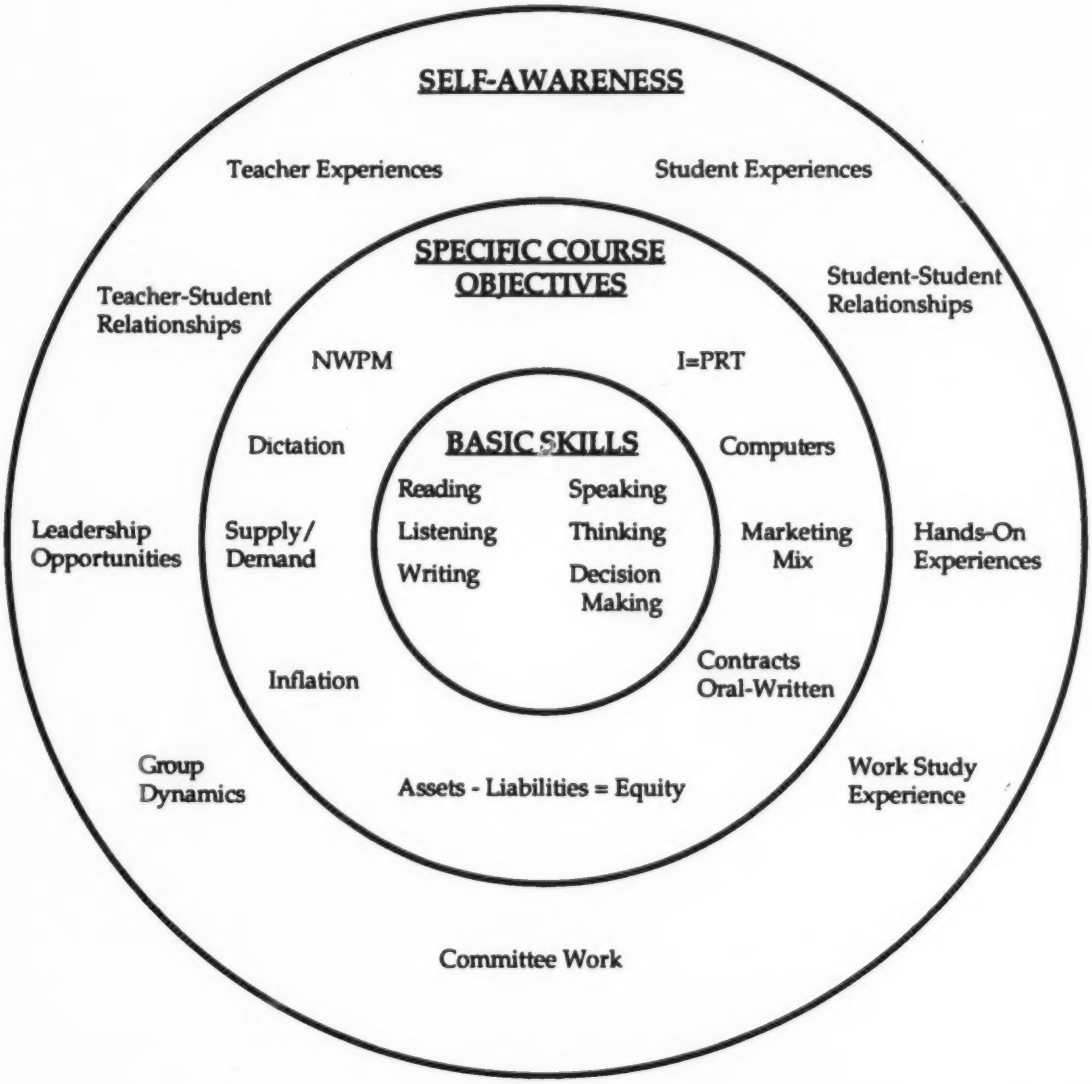
Program Description

The Business Education program is designed to meet the needs of students in three different areas: general education, personal use education, and vocational education. The first area of emphasis is general education. The program and each course included in the program is designed and delivered in a manner that will assist each student in developing the ability to read, write, listen, speak, think, make decisions, and to get along with others. A second area of emphasis is personal use education. Business courses deal with a subject matter or content that is relevant to the present and future lives of every student in the school system. Skills such as typing or keyboarding, and notetaking are valuable skills for people in any occupation or endeavor. A personal body of knowledge that includes some understandings of economics, marketing, accounting, and business organization results in a better informed voter and a more efficient consumer. The third area of emphasis is vocational education. Although all Business Education courses provide background and understandings that enhance employability, some courses are specifically designed to assist students in developing entry level employment skills. The three areas of emphasis all compliment one another and create a situation where individual students can take the same course for different reasons and all can attain their respective goals. Recent national research showing that graduates of secondary vocational programs have a success rate in four year postsecondary degree programs that is equal to or higher than that of graduates of general or traditional college prep programs is further evidence of the complimentary nature of the three areas of emphasis.

The diagram on the following page is designed to provide a graphic representation of the goals, objectives, content, and activities that make up the Business Education Program in the Des Moines Public Schools. It clearly illustrates that the focus of the Business Education Program is the development of reading, speaking, listening, writing, and thinking skills on the part of the program participants. It further illustrates that these general educational skills are developed while studying content with a high degree of personal and occupational relevance. Educational activities are designed to provide abundant opportunities for program participants to apply the knowledge and skills they have achieved.

The Des Moines Public Schools offer Business Education courses at the ten middle schools, the five area high schools, Central Campus, and the two alternative schools. Assistance and materials are also provided to special education programs and home schooling students.

BUSINESS EDUCATION



Middle Schools

The focus of the content at the middle school level is the development of skill in in the use of a computer keyboard. Efficient development of keyboarding skill requires explicit instruction in proper technique followed by ample opportunity for monitored or guided practice. Motivation is the key instructional ingredient in the process. Positive determination and the ability to concentrate are the inputs required of the students. Keyboarding instruction is delivered in classrooms equipped with computers. This allows students to acquire some knowledge about computers and software while developing their keyboarding skill. The combination of keyboarding skill and confidence in the use of a computer provides students with an excellent foundation for success in their high school careers and beyond. It allows them to capitalize on the power of a computer as a personal tool and it also provides the background needed for success in high school courses that involve extensive use of computers. The middle school curriculum includes the following courses:

6th Grade Keyboarding	Nine week wheel course
7th Grade Keyboarding	Nine week wheel course
8th Grade Keyboarding	One semester elective

Goodrell and Meredith offer only the 7th and 8th grade courses. Weeks offers only the 6th and 8th grade courses. All other middle schools offer all three courses.

Comprehensive High Schools

The Business Education Programs at the five comprehensive high schools are designed to provide a wide range of topics and learning opportunities to meet the needs and interests of a broad spectrum of each student body. All Business Education courses are electives so enrollment is a true reflection of student interest. All courses are designed as one semester courses and are available to students in two or more grade levels. This increases access by allowing students who, for a variety of reasons, find they have a free time slot in their schedule. The majority of courses offered in the five comprehensive high schools fall into one of four curricular strands. Those four strands include accounting, computers, secretarial, and marketing. Some courses provide background or foundational knowledge necessary for success in the strand courses while others, such as Office Education, provide capstone experiences allowing students to refine and apply knowledge and skill previously developed. By offering an array of one semester courses that are semi-sequential in structure, the district can meet the needs of two distinct groups of students. One group includes those students who want to develop an advanced employable level of skill in a specific area. The other group includes those students who want to enhance their personal level of knowledge or skill in a particular area.

The Business Education curriculum available in the area high schools provides opportunities for developing keyboarding skill for those students who did not acquire those skills in middle school. It provides background knowledge and skills for students electing to enroll in the Central Campus Business Education program. Several of the courses offered to 11th and 12th grade students are articulated with programs available at Des Moines Area Community College and other postsecondary institutions. The Business Education Curriculum in the area high schools includes the following courses:

Exploring Business	General Business
Keyboarding	Advanced Keyboarding
Business Math	Computer Applications
Accounting 1	Accounting 2
Accounting 3	Accounting 4

Word Processing
Desktop Publishing
Marketing/Principles
Marketing/Sales
Shorthand
Business Law
Office Education
Information Processing
Business Procedures
Marketing/Retailing
Marketing/Entrepreneurship
Notetaking
Applied Economics

The four Marketing courses and Office Education include a work experience component. Every course is not offered in every school every semester. Each school selects course offerings from the above list in accordance with staffing and space limitations and student interest. Actual offerings will be apparent in enrollment statistics reported elsewhere in this report.

Central Campus

The Business Education program at Central Campus includes four programs. Each program was designed to assist students in developing an employable level of skill in a specific area. Many graduates use the skills developed in Central Campus programs to acquire jobs allowing them to finance postsecondary educational endeavors. The Central Campus curriculum includes the following programs:

Accounting Specialist
Advanced Computer Technology
Executive Secretary
WordPerfect

Other Descriptions

Appendix A attached to this report includes a brief description of each couse offered as part of the Business Education curriculum. Curriculum guides have been developed for each course and are available in the office of the Supervisor of Business Education and each building where the course is offered. Each curriculum guide includes a brief description of the course, a statement of policy concerning multi-cultural non-sexist practices, a list of general education competencies, a list of content specific competencies, a content outline, a statement of evaluation procedures, and a list of materials adopted for use in the course.

Instructional Methods

Instructional methods or strategies used in Business Education courses are left to the descretion of individual teachers, subject to review and evaluation by building and central office administrators. Observation of classes across the district will reveal a wide range of teaching and learning strategies being used. This variation of strategy exists from class to class as well as from day to day within a single course. Business teachers, as a group, place a relatively heavy emphasis on "hands-on" type activities, especially in computer or skill oriented courses.

A goal of the Business Education Department the last two years has been to employ teaching and learning strategies that enhance the development of reading, listening, speaking, writing, thinking, and decision making skills.

Lincoln High School and North High School offer a Marketing program that includes a cooperative work experience component. Both schools offer a DECA (Distributive Education Clubs of America) program which provides opportunities for the development of leadership skills and for marketing skills competition against students from other schools at the local, state, and national level.

East High School offers a Marketing program that includes responsibility for selling the ads for the school year book. The instructor has taken that project, incorporated it into the Marketing curriculum and developed a very relevant and effective learning experience.

East High School and Lincoln High School offer an Office Education program that includes a cooperative work experience component. Both schools offer a Business Professionals of America program which provides opportunities for the development of leadership skills and for office skills competition against students from other schools at the local, state, and national level.

Central Campus offers a cooperative work experience program in conjunction with the Executive Secretary, Word Processing, and Accounting Specialist programs.

Both Alternative Schools offer Business Education programs that are individualized to meet the specific needs of individual students.

Recent Program Improvements

The most significant improvement in the Business Education program in the last few years has been the acquisition and use of computers. Just four years ago the department had only three computer labs in the entire district. Today every secondary school has a computer lab for use by the Business Education Department and three of the schools have two labs. The infusion of computer technology into the instructional program has resulted in increased enthusiasm, improved morale, increased enrollment, broadened the base of students electing Business courses, and has allowed the students to develop skills needed in today's world. These computer labs are used to nearly 100% capacity and in several instances more students have elected courses offered in the labs than could be accommodated.

Another program improvement, made possible by the acquisition of compters, is the development and implementation of several new courses in the fall of 1992. The new courses are offered in the area high schools and were designed to assist students in developing computer related skills needed in the job market and in the pursuit of advanced education. Those new courses include Keyboarding, Advanced Keyboarding, Word Processing, Information Processing, Desktop Publishing, and Business Procedures. These courses utilize curriculum time previously devoted to Typing 1-4, and Office Procedures.

The acquisition of computer labs for the ten middle schools has improved the program at that level by allowing a more comprehensive effort toward keyboarding skill development. The obvious advantage of this placement is that students can now utilize their keyboarding skill throughout their entire high school career.

Prior to the fall of 1991 the district's marketing curriculum consisted of two one-year-long courses, Marketing I and Marketing II. Both courses included a co-op work experience component and a DECA (Distributive Education Clubs of America) component in addition to the standard classroom instruction component. When students enrolled in the program they were expected to participate in all components of the program. This required a large investment of a student's limited elective time and often conflicted with the commitments required of athletes or participants in other extracurricular activities. During the 1990-91 school year, a committee of teachers revised the Marketing curriculum into four semi-sequential one semester courses. Co-op work experience and DECA were included in the recommended program as optional activities. This restructuring has incresed the flexibility and access of the program while retaining the opportunities for those students who wish to to concentrate on developing their marketing knowledge and skills over a two year period.

INPUT EVALUATION

Funds to support the Business Education Program come from a variety of sources. State and federal monies allocated to school districts for the improvement of vocational education programs are a source of discretionary funds. Some instructional support levy funds are allocated to improvement of vocational programs. Other funds are provided through the district human resources budget, the curriculum development budget, and the instructional materials budget. Decentralized funds are budgeted for Business Education in most secondary buildings. Participation fees are collected from students enrolled in some Business Education courses that require the use of common supplies such as printer ribbons, ink cartridges, and paper.

State Vocational Funds and Instructional Support Levy Funds

Funds from these two sources are combined and allocated to four budget accounts which are administered through the offfice of the Supervisor of Business Education and the Director of Central Campus.

Account Description	1991-92 Budget	1992-93 Budget
In-Service	$ 3,833	$ 3,500
Out-of-District Travel	3,500	3,500
Supplies/Materials	10,000	12,500
Equipment	55,000	48,877
Total	$72,333	$68,377

The In-Service account is used to acquire materials and conduct workshops designed to assist teachers in enhancing their teaching skills and content knowledge.

The Out-of-District Travel account is used to assist teachers with the expense of traveling to professional meetings and conferences related to their teaching assignment. This includes chaperoning students who win the right to attend state or national contests by competing in regional contests sponsored by Business Professionals of America or Distributive Education Clubs of America.

The Supplies/Materials account is used to buy computer software and other supplementary materials for use in classrooms.

The Equipment account is used to acquire equipment for use in the Business Education Program. The majority of the 91-92 funds were used to equip a computer lab at Lincoln High School. The majority of the 92-93 funds were used to equip a computer lab at East High School.

Federal Funds (Carl Perkins)

The district budget for 1992-93 for Carl Perkins funds has been submitted to the Department of Education. The Business Education portion of that budget proposal is as follows:

Salaries	$4,000	Teachers (summer work)
Contracted Services	9,000	Development of evaluation model
Materials/supplies	23,000	Software and supplementary materials
Equipment	61,000	Computers/printers
Travel	1,000	Teachers/Conferences
Total	$98,000	

Human Resources Budget

The Human Resources Budget is administered by the Human Resources Department. Individual buildings are allocated a certain number of staff positions determined primarily by projected enrollment. Building administrators then distribute that allocation among the various curricular areas.

Human resources expenditures for Business Education for 1992-93 are as follows:

	# Sections	FTE	Salary	Benefits	Total
Middle Schools	55	9.2	$282,835	$83,436	$366,271
Alternative Schools	12	2	72,105	21,271	93,376
Central Campus	21	3.5	134,654	39,723	174,377
East High School	47	7.8	294,116	86,764	380,880
Hoover High School	16	2.7	91,508	26,995	118,503
Lincoln High School	50	8.3	279,509	82,455	361,964
North High School	21	3.5	112,432	33,167	145,599
Roosevelt High School	23	3.8	107,303	31,654	138,957
Total	245	40.8	$1,374,462	$405,466	$1,779,928

Human resourse expenditures for the administration of the Business Education Program include the salary of one supervisor and one-fourth of one secretarial position. The total expenditure for 1992-93 will be $78,196; $60,383 for salaries and $17,813 for benefits.

Curriculum Development Budget

The Curriculum Development Budget is used to pay teachers for time spent reviewing and revising the curriculum, developing curriculum guides for each course, and selecting appropriate instructional materials for use in the classroom. Most of this work is done in the evening, on weekends, or during the summer to avoid having teachers out of the classroom during the school day. The amount budgeted for 1992-93 is $4,640.

Instructional Materials Budget

The Instructional Materials Budget is administered through the Instructional Support Division. It is used primarily to acquire textbooks in accordance with the district textbook adoption cycle. The amount budgeted each year varies with the number of courses on the cycle and the projected enrollment in those courses. A list of textbooks in current use is included in Appendix B of this report. The textbook adoption schedule and tentative budgets for the next several years are as follows:

	Amount Budgeted	
Fall 1992		
Keyboarding/Advanced Keyboarding	$18,148	
Business Math	2,376	
Word Processing	1,550	
Information Processing	1,550	
Desktop Publishing	1,550	
Business Procedures	1,550	
WordPerfect	1,692	$28,416
Fall 1993		
Middle School Keyboarding	$24,000	
Executive Secretary	3,000	
Office Education	3,000	$30,000

Fall 1994		
Accounting 1 & 2	$15,000	
Accounting Specialist	3,000	$18,000
Fall 1995		
Accounting 3 & 4	$6,000	
Applied Economics	8,000	
Advanced Computer Technology	6,000	$20,000
Fall 1996		
Exploring Business	$6,000	$6,000
Fall 1997		
Business Law	$10,000	
Marketing Principles	8,000	
Marketing Retailing	8,000	
Marketing Sales	8,000	
Marketing Entrepreneurship	8,000	
Computer Applications	14,000	$48,000
Fall 1998		
General Business	$9,000	
Notetaking	3,000	
Shorthand	2,000	$14,000

Building Budgets

Each secondary building allocates a portion of their decentralized funds to the Business Education Program in the buildling. These funds are used at the descretion of the staff in each building, subject to the approval of the building administrator. Typically, the funds are used to acquire supplementary instructional or resource materials. In some instances they are used to buy additional equipment for classroom use. The building budgets for the 1992-93 school year are as follows:

Brody	$100	Alternative North	$400
Callanan	500	Alternative South	900
Goodrell	200	Central Campus	3,070
Harding	300	East	4,450
Hiatt	125	Hoover	350
Hoyt	200	Lincoln	1,780
McCombs	0	North	300
Meredith	120	Roosevelt	1,200
Merrill	100		
Weeks	100		

Student Fees for Consumables

Many of the courses offered by the Business Education Department require the use of consumable supplies such as printer ribbons, ink cartridges, toner cartridges, computer disks, and printer paper. Each year a uniform fee schedule is established by estimating the cost of supplies needed and dividing by the projected enrollment. The uniform schedule of student fees for consumables for 1992-93 is as follows:

Middle Schools	
6th Grade Keyboarding	$1.00
7th Grade Keyboarding	$1.00
8th Grade Keyboarding	$2.00
Area High Schools	
Business Procedures	$5.00
Office Education	$5.00
Keyboarding	$5.00
Advanced Keyboarding	$5.00
Word Processing	$5.00
Information Processing	$5.00
Desktop Publishing	$5.00
Computer Applications	$5.00
Central Campus	
Accounting Specialist	$10.00
Advanced Computer Technology	$10.00
Executive Secretary	$10.00
WordPerfect	$10.00

Equipment Inventory

The most common pieces of equipment used in the Business Education Program are computers and typewriters. Most of the typewriters in use are seven to twelve years of age. The district has been replacing typewriters with computers as rapidly as the budget will allow. Central Campus was equipped with two computer labs in the fall of 1983. Upper Iowa University equipped Roosevelt with a computer lab for the fall of 1988. They replaced it with an updated lab for the fall ot 1992. They use the lab for their evening program and allow the Business Education Department at Roosevelt to use it during the day. The district equipped East, Lincoln, Callanan, Goodrell, Harding, Hoyt, and McCombs with computer labs in the fall of 1989. The district equipped Hoover, North, Brody, Hiatt, Meredith, Merrill, and Weeks with computer labs in the fall of 1990. Vocational Education funds were used to provide a second computer lab at Lincoln in the fall of 1991 and a second lab at East in the fall of 1992. The typical computer lab consists of twenty-five computers, four printers, and one liquid crystal display (LCD). Some buildings have added equipment to the lab using a variety of funding sources. An inventory of equipment used by the Business Education Department is included in Appendix C of this report.

Community Resources

All Business Education teachers are encouraged to use community resources in the delivery of instruction. Many invite guest speakers to their classrooms and others take classes on field trips to local businesses and organizations. Local businesses and organizations provide special inputs in Applied Economics, Office Education, and Marketing.

Applied Economics is a course offered to students in the 11th and 12th grades. Junior Achievement of Central Iowa helps support the course in a variety of ways. Their most significant contribution is the recruitment and training of business consultants who spend one day per week in each Applied Economics class. Local businesses and organizations often make participation in the Applied Economics classes a part of the consultants job. The consultant training provided by Junior Achievement includes a review of the course objectives, suggested strategies for use in the classroom, and a clarification of the consultants role. The role of the consultant is to provide relevance to topics or issues addressed in the class by relating how the topic or issue impacts the

local company or organization and the people who work there. The following is a list of local companies or organizations who have provided consultants for the 1991-92 school year and the fall semester of the 1992-93 school year and the school to which they were assigned.

AIB	Lincoln
Air National Guard	Lincoln
Allied Mortgage	North
Amoco Customer Service	North
Boatman's Bank	Roosevelt
Boatman's Bank	East
CDS	Roosevelt
CDS	Lincoln
Comtron	East
Continental Western Life	Hoover
Des Moines Area Community College	Roosevelt
Des Moines Area Community College	Lincoln
Edco Credit Union	Roosevelt
EDS	Hoover
Employers Mutual	East
Federal Home Loan Bank	Lincoln
First Star Bank	North
IBM	East
Iowa Power	East
IRS	East
IRS	Lincoln
Julander Printing	North
National Travelors Life	Lincoln
National Travelors Life	North
Northwester Bell	Lincoln
Parking Inc.	East
Parking Inc.	North
Pioneer Int.	East
Piper, Jaffray & Hopwood	East
R & R Investors	East
Ryder Truck	North
State of Iowa	East
United States Department of Treasury	East
US West	East
Walgreens	East
Wheeler Consolidated	East
Worlds Finest Chocolate	Lincoln

Cooperative work experience is an optional component in the marketing and office education programs. Students are assisted in finding jobs in marketing or in offices. The instructor works with the student and employer to coordinate the activities on the job and the activities in the classroom to make both more meaningful and educationally productive experiences. The companies that participate in these programs are truly partners in the educational process. The following is a list of companies that participated during the 1991-92 school year.

ABC School of Learning	Lincoln	Marketing Education
Apple Tree Children's Center	Lincoln	Marketing Education
Avis Car Rental	Lincoln	Marketing Education
Bell Bros. Heating & Air Conditioning Inc.	Lincoln	Marketing Education
Big Als	Lincoln	Marketing Education

Big Bear Store	North	Marketing Education
Big Bear Store	East	Office Education
Bill's Cyclery	Lincoln	Marketing Education
Bishops Cafeteria	Lincoln	Marketing Education
Breadequx Pizza	Lincoln	Marketing Education
Breese Family Tae-Kwon-Do & Fitness Center	Lincoln	Marketing Education
Brooks Fashions	Lincoln	Marketing Education
Carnival Shoes	North	Marketing Education
Chek Mailing Service	North	Marketing Education
Clarke Company	East	Office Education
Container Recovery, Inc.	East	Office Education
Continental Travel Associates	Lincoln	Office Education
Country Kitchen	Lincoln	Marketing Education
Crystal Tree Restaurant	Lincoln	Marketing Education
Dahls Foods	North	Marketing Education
Denny's Restaurant	Lincoln	Marketing Education
Des Moines Public LIbrary	East	Office Education
Des Moines Public Schools	East	Office Education
Donahue Ins.	Lincoln	Marketing Education
Dr. Rochelle Levy	Lincoln	Office Education
Drug Mart	Lincoln	Marketing Education
Duane's Painting	Lincoln	Marketing Education
EDCO Credit Union	East	Office Education
Eddy-Walker Equipment Co.	East	Office Education
Embassy Suites On The River	Lincoln	Marketing Education
Fair Lanes Des Moines	North	Marketing Education
Fairway	North	Marketing Education
Fashion Gal	Lincoln	Marketing Education
Fashion Gal	North	Marketing Education
Federal Home Loan Bank	Lincoln	Office Education
Flowerama	Lincoln	Marketing Education
Food 4-Less	Lincoln	Marketing Education
Food Saver	Lincoln	Marketing Education
Garten & Wanek Law Firm	East	Office Education
God Fathers Pizza	Lincoln	Marketing Education
Gotham Club	Lincoln	Marketing Education
Grays Lake/YMCA	Lincoln	Marketing Education
Great Clips	Lincoln	Marketing Education
Half Price Store	Lincoln	Marketing Education
Hals Sportswear	Lincoln	Marketing Education
Hardees Restaurant	Lincoln	Marketing Education
Hardees Restaurant	North	Marketing Education
Home Day Care	Lincoln	Marketing Education
Hot Line Shoes	Lincoln	Marketing Education
Hotel Fort Des Moines	Lincoln	Marketing Education
Hy-Vee Food Store	Lincoln	Marketing Education
Hy-Vee Food Store	North	Marketing Education
HyVee Store	East	Office Education
Iowa Institute of Orthopaedics	East	Office Education
K-Mart	Lincoln	Marketing Education
Kirke-VanOrsdel, Inc.	Lincoln	Office Education
La Pizza House	Lincoln	Marketing Education
LaMair-Mulock-Condon Insurance Co.	Lincoln	Office Education
Long John Silvers	North	Marketing Education

Mama Laconas	Lincoln	Marketing Education
Marriott Hotel	Lincoln	Marketing Education
McDonalds	Lincoln	Marketing Education
McDonalds	North	Marketing Education
Menards	Lincoln	Marketing Education
Midwest Legal Services	East	Office Education
Midwest Marketing	Lincoln	Marketing Education
Midwest Power	East	Office Education
Midwest Power	Lincoln	Office Education
Montgomery Ward	Lincoln	Marketing Education
MycKoff Hig Inc.	Lincoln	Marketing Education
Newburgh Brokerage	Lincoln	Office Education
Noah's Cleaners	Lincoln	Marketing Education
Norwest Card Services	Lincoln	Marketing Education
Payless Cashway	Lincoln	Marketing Education
Pi Chem	Lincoln	Marketing Education
Pioneer Int.	East	Office Education
Pizza Hut	Lincoln	Marketing Education
Polk County Health Services	Lincoln	Office Education
Premier Portraits	Lincoln	Marketing Education
Principal Financial Group	East	Office Education
Principal Financial Group	Lincoln	Office Education
Richman Gordman	Lincoln	Marketing Education
Sears Roebuck And Co.	Lincoln	Marketing Education
Sears Roebuck And Co.	North	Marketing Education
Southridge Theater	Lincoln	Marketing Education
Sport Page	Lincoln	Marketing Education
St. Paul Lutheran	East	Office Education
Sun Drug	North	Marketing Education
Syntex Animal Helath	East	Office Education
Taco Time	Lincoln	Marketing Education
Target Stores	Lincoln	Marketing Education
Target Stores	North	Marketing Education
US Department of Agriculture	East	Office Education
Village Inn Restaurant	Lincoln	Marketing Education
Wakonda Country Club	Lincoln	Marketing Education
Walgreen Drug Store	Lincoln	Marketing Education
Walgreen Drug Store	East	Office Education
Wendys Old Fashioned Hamburgers	North	Marketing Education
Wolford Corp.	Lincoln	Marketing Education
Younkers	Lincoln	Marketing Education
Younkers	East	Office Education

PROCESS EVALUATION

1992-93 Goals and Objectives

The primary goal of the Business Education Department for 1992-93 is the implementation of six new courses in the area high schools. The six courses are Keyboarding, Advanced Keyboarding, Word Processing, Information Processing, Desktop Publishing, and Business Procedures. The curriculum for the six courses was developed and materials were selected during the 1991-92 school year. The implementation process involves teacher preparation, materials acquisition and distribution, and providing the student body with accurate information about the nature of each course. The teachers involved have completed a variety of computer related staff development courses and are working with counselors in each building to help inform the students of the courses. They are also meeting on a monthly basis to exchange ideas about the materials and instructional strategies used in the new courses.

A second goal of the Business Education Department for 1992-93 is to review and revise the curriculum and select new instructional materials for the middle school keyboarding courses, the Office Education Program, and the Executive Secretary Program. Committees of teachers were established in the spring of 1992 to work on this goal. The committees work is on schedule and the revised courses will be delivered beginning in the fall of 1993.

A third goal of the Business Education Department is to research and develop a more refined and comprehensive system for tracking student achievement in academics and in the development of occupational competencies. This effort is a joint project with the Home Economics and Technology Education programs. Assistance in being provided by the Department of Information Management. The ultimate goal is to have a system that is efficient to administer, equitable, and that provides reliable information to students, their parents, employers, and postsecondary educational institutions.

Other ongoing goals of the Business Education Department include: maintaining a focus on the development of skills in reading, listening, speaking, writing, thinking, and problem solving; maintaining compliance with state and federal vocational education guidelines; and increasing the postsecondary articulation opportunities for Des Moines Public School students. The former was addressed specifically during Fall In-Service and is addressed with individual teachers on an ongoing and informal basis. The latter two goals are addressed by maintaining close contact with the Iowa Department of Education and local postsecondary institutions respectively.

In-Service and Staff Development

The members of the Business Education staff have extensive educational backgrounds and extensive and diverse experiencial backgrounds. Fifty different teachers were assigned Business Education classes during the fall of 1992. Thirty of those have Masters degrees or beyond and eight are currently working on Masters programs. Almost all have experience working in business or industry. Several have operated their own business. Collectively, they have over 120 years of business experience in banking, insurance, real estate, farming, construction, pension administration, manufacturing, office work, retail sales, outside sales, mortgage lending, transportation, health care, and painting.

All Business Education teachers participate in the district March In-Service and a one-half day fall in-service conducted by the Supervisor of Business Education. All teachers are also encouraged to participate voluntarily in a variety of other in-service or staff development activities. They are encouraged to choose activities that compliment their professional growth plan and their teaching

assignment. They are also encouraged to balance their efforts between content specific activities and activities that address more general educational issues.

Several teachers participated in Phase III courses during the 1991-92 school year. The courses selected and the number attending are as follows:

Course Title	Number Attending
Youth At Risk	5
CARE	7
Effective Schools	10
SUCCESS	5
COPE	3
Cooperative Learning	4

The most popular content related staff development classes attended by Business Education teachers were computer related. Twenty three teachers attended classes on word processing, database, spreadsheet, graphics, and desktop publishing offered by the district Staff Development Department, Heartland Area Education Agency, and private organizations. Other content related classes or workshops selected and the number attending are as follows:

Course Title	Number Attending
Business Horizons Workshop	1
Drake University Insurance Workshop	1
Applied Economics Fellowship	1
Applied Economics Consultant Trainning	5
Postal Procedures Workshop	1

Attendance at professional conferences is another way Business Education teachers enhance their skills and keep abreast of the changes occurring in the field. Conferences attended and the number of participants is as follows:

Conference	Number Attending
Iowa Business Education Association	5
Iowa Computer Using Educators	6
Iowa Marketing Educators	3
Business Professionals of America	6
Iowa Vocational Association	2
American Vocational Association	2
National Education Computing Conference	1
International Society for Business Education	1

PRODUCT EVALUATION

Student Achievement

The success of the Business Education program is measured by how well the student participants achieve the mission of the department.

> *"The Business Education Department assists students in developing skills in human relations, computation, reading, listening, writing, and speaking while acquiring a personal body of knowledge that facilitates thinking and decision making and gives students better control of their futures."*

Teachers in the Business Education Department use a variety of techniques to measure students progress toward the acheivement of that mission. Tests, quizzes, and teacher evaluation of student work are the three most commonly used techniques. Most of the tests given by Business Education teachers are either constructed by the teacher or are acquired as a supplement to text materials used in the course. Most of the latter are standardized and validated by the publisher of the text materials. Both types of tests are used primarily to measure a student's acquistion of *"a personal body of knowledge"* related to the content of a particular course. Quizzes are usually teacher constructed and used frequently to assist students in maintaining their focus and to provide teachers with feedback to evaluate the effectiveness of instructional techniques being employed. The process used for teacher evaluation of student work varies with the type of student work being evaluated. Teachers are encouraged to make the process as objective as possible while infusing appropriate levels of professional judgment. This technique is used most often to measure students achievement *"in developing skills in human relations, computation, reading, listening, writing, speaking, thinking , and decision making"* by measuring how well they apply those skills in projects and activities such as class participation, class presentations, written papers, small group work, simulations, and computer projects.

The Business Education Department prides itself in making course offerings available to all students regardless of their academic ability. This often results in class rosters where the range of ability among the students is as wide as that of the entire student body. The development of attitudes and skills necessary for interacting with a diverse group of people and functioning in a productive manner is very much a part of Business Education. The educational challenges created by this situation are numerous. Teachers must be prepared to meet the variant needs of class members by using a variety of teaching strategies and materials. They must also implement an evaluation system that is flexible enough to be equitable to all and that is understood and accepted by all. Most teachers meet this evaluation challenge by striving for an appropriate balance between the use of standards recommended by employers and others and the use of standards within the reach of all or at least most participants.

Business Education teachers at Central Campus use competency certificates to summarize and report student achievement. The certificates are rather detailed and help students focus on specific skills needed for success in a particular area. They are however, time consuming to prepare and may not be appropriate evaluation tools for teachers who see large numbers of students each day.

District policy requires each teacher to summarize the information gained in the evaluation process and report the results in the form of a letter grade. Ideally, that letter grade will be an accurate reflection of the students achievement, employability, and potential for success in advanced educational endeavors.

Senior Survey

Each year the Des Moines Public Schools conduct a survey of the senior class to measure students attitudes and opinions about the educational programs in which they have participated. In the survey conducted in the spring of 1992, 1,240 students or 85.6% of the senior class responded. One portion of the survey asks students to evaluate their experiences in eleven diffetent curricular areas by responding to a series of statements on an agree/disagree basis. (1=strongly agree, 5=strongly disagree) The responses related to Business Education are as follows:

Statements	Average Rating	Rank Among Curricular Areas
Appropriate classes provide information about careers	1.8	First
Classes provide a variety of meaningful learning activities	2.0	Second
Classes use materials that treat students equally regardless of race and sex	1.8	First
Classes provide for different abilities of students	2.3	Third (4 way tie)
Classes provide preparation for further study or training	2.0	Second
Students receive frequent, timely feedback of their progress	2.3	Second (2 way tie)
Class sizes are too large	3.3	Eighth (4 way tie)

Middle Schools

6th Grade Keyboarding and 7th Grade Keyboarding are both designed as nine week courses and offered as part of the exploratory wheel at their respective grade levels. All students are scheduled into the wheel except those with schedule conflicts. Schedule conflicts sometimes result from participation in Des Moines Plan Programs, Special Education Programs, Gifted and Talented Programs, and Music Programs. The projected enrollment in 6th Grade Keyboarding and 7th Grade Keyboarding for 1992-93 is calculated by multiplying the enrollment for the first nine weeks by four. Those projected enrollments are as follows:

School	6th Grade	7th Grade
Brody	232	200
Callanan	205	190
Goodrell		206
Harding	204	144
Hiatt	164	188
Hoyt	244	224
McCombs	204	212
Meredith		216
Merrill	192	196
Weeks	188	
Total	1633	1776

8th Grade Keyboarding is a one semester elective. The enrollments for the 1991-92 school year and for the fall semester of the 1992-93 school year are as follows:

	1991-92			1992-93
	Fall	Spring	Total	Fall
Brody	35	29	64	51
Callanan	48	50	98	49
Goodrell	53	49	102	56
Harding	46	34	80	38
Hiatt	26	46	72	37
Hoyt	33	39	72	23
McCombs	48	52	100	48
Meredith	49	56	105	26
Merrill	40	22	62	45
Weeks	21	43	64	38
Total	399	420	819	411

Area High Schools

All Business Education courses offered at the area high schools are electives. The enrollments for the 1991-92 school year and for the fall semester of the 1992-93 school year are as follows:

Area High School Enrollment By Course
1991-92 and 1992-93

	1991-92				1992-93
CourseTitle	Fall	Spring	Total	CourseTitle	Fall
Accounting 1	338	67	405	Accounting 1	330
Accounting 2		253	253	Accounting 2	13
Accounting 3	60	22	82	Accounting 3	52
Accounting 4		27	27	Accounting 4	
Applied Economics	380	394	774	Applied Economics	329
Business Law	42	77	119	Business Law	49
Business Math	126	134	260	Business Math	104
Exploring Business	206	57	263	Exploring Business	155
General Business	45	139	184	General Business	98
Computer Applications	370	633	1003	Computer Applications	565
Intr. Computer Prog.	44	38	82		
Marketing/Principles				Marketing/Principles	74
Marketing/Retailing				Marketing/Retailing	15
Marketing/Sales	201	45	246	Marketing/Sales	85
Marketing/Entrepren		125	125	Marketing/Entrepren	
Marketing/Coop	106	93	199	Marketing/Coop	99
Notetaking	107	70	177	Notetaking	68
Office Education	36	31	67	Office Education	32
Office Education Coop	35	31	66	Office Education Coop	32
Office Procedures	66	42	108	Business Procedures	16
Shorthand 1	10		10	Shorthand 1	
Shorthand 2				Shorthand 2	
Typing 1	1117	574	1691	Keyboarding	1036
Typing 2	110	281	391	Advanced Keyboarding	114
Typing 3		14	14	Word Processing	91
Typing 4				Information Processing	32
Intensive Keyboarding	8	13	21	Desktop Publishing	31
Total	3407	3160	6567		3420

Additional enrollment information is provided in Appendix D at the end of this report.

Central Campus

All Business Education courses offered at Central Campus are electives. All are offered on a full-year multi-period basis as described in Appendix A. The enrollments for the 1991-92 school year and for the fall semester of the 1992-93 school year are as follows:

Central Campus Business Education Enrollment
1991-92 and Fall Semester of 1992-93

	1991-92		1992-93
	Fall	Spring	Fall
Accounting Specialist I	17	12	15
Accounting Specialist II	10	7	20
Advanced Computer Tech	14	13	15
Executive Secretary I	7	8	15
Executive Secretary II	6	4	5
Word Processing I	13	8	10
Word Processing II	6	4	4
WordPerfect			7
Coop Work Experience	17	15	9
Total	90	71	100

FUTURE PLANNING

Curriculum

One of the greatest challenges facing the Business Education Department in achieving their mission is the development and implementation of curriculum that is continually relevant to an ever changing environment. In an attempt to meet that challenge the following actions will be taken.

- The emphasis on the development of reading, listening, writing, speaking, computation, thinking, decision making, and human relations skills will be continued.
- Teachers will be encouraged to continue using instructional strategies designed to enhance the development of those skills.
- The district seven year cycle for curriculum revision and adoption will be analyzed each year to determine if opportunities exist for rearranging that schedule in order to meet the most pressing needs. Technology oriented courses need more frequent revision than other courses.
- Teachers will be encouraged and assisted in their efforts to monitor the environment in which we live, especially the business environment, and make changes necessary to keep the curriculum current and relevant.
- The Accounting curriculum will be evaluated and revised during the 1993-94 school year. Material will be selected and acquired for use beginning in the fall of 1994. The total estimated cost of this project will be $25,000, $18,000 for materials and $7,000 for curriculum development and materials selection.
- Marketing courses and programs will be promoted in all high schools in response to suggestions of advisory committee members, the number of students working in that area, and the projection of continued growth in that career area by most current literature.

Technology

A second major challenge of the Business Education Department will be acquiring and maintaining the equipment necessary for assisting students in developing the technological skills they need to compete in today's job market or in post secondary educational endeavors. Computers are the most common form of technology needed and used by the Business Education Department. Computers are valuable teaching tools in all Business Education classes, but they are absolutely essential learning tools in those classes designed to develop employment skills and personal technological skills necessary for success in almost any career or educational venture. The table that follows shows the number and location of computer labs currently in use, the number needed to meet the current projected need, and the difference betweeen current inventory and current need. It includes high school data only, it does not include middle school data. The number of labs needed is based on the belief that all classes in Keyboarding, Word Processing, Information Processing, Desktop Publishing, Business Procedures, Office Education, Accounting, and all Central Campus classes should be delivered in a computer lab. The projection of the number of labs needed does not take into consideration any enrollment increases due to the availability of computers. Recent history would indicate the projection is conservative in that respect.

School	Current Inventory	Number Needed	Difference
Central Campus	3	3	0
East	2	4	2
Hoover	1	2	1
Lincoln	2	4	2
North	1	2	1
Roosevelt	1	3	2
Alt. North	1	1	0
Alt. South	0	1	1
Total	11	20	9

Due to the rapidity of change in the computer industry the effective life of a computer lab at the high school level will be five years or less. Given the need for nine additional labs, the age of the current inventory, and the need to replace all labs on a five year cycle, the district needs to acquire a minimum of four computer labs per year into the forseeable future.

The labs currently in use were acquired at a cost ranging from approximately $37,500 to $42,500. As the level of expertise on the part of the student body and the staff continues to increase the labs will need to be equipped with more powerful computers capable of handling more sophisicated software. In spite of a general decline in the cost of computer technology, the need for increased power and sophisication makes it reasonable to estimate the cost of labs acquired in the near future to be in the $45,000 - $50,000 range. The resulting investment required of the district to meet this need is approximately $180,000 - $200,000 annually.

Due to a more limited and focused curricular objective the computer labs at the middle school level should have an expected useful life of approximately ten years and the replacement need may be able to be met by reallocating computers replaced at the high school level.

Instruction

The greatest asset of any educational program is the attitude and ability of the teachers who deliver the program in the classroom. To continue the present good fortune of the Business Education Program the following actions will be taken:

- The Supervisor of Business Education will work with the Department of Human Resources to recruit and hire the best teachers that can be found.
- Teachers will be encouraged to assess their strengths and weakness and develop individualized professional improvement plans based on the perceived needs.

Evaluation

To improve the district's ability to track and document the academic achievement of students enrolled in Vocational Education courses, the Business Education Department, in conjunction with the Home Economics and Technology Education Departments and with the assistance of the Information Management Department, has embarked on a project to develop an efficient, equitable, and effective system for capturing the data needed. The cost of this project will be shared by the three vocational programs and paid for with Carl Perkins funds received by the district. It is hoped that some elements of the system can be developed and piloted during the spring semester of 1992. It is anticipated that this project will require ongoing adjustments as needs and requests for data change.

Appendix A
Course Descriptions

MIDDLE SCHOOLS

6TH GRADE KEYBOARDING

Length: 9 weeks (1 quarter)
Prerequisites: None
Grade Level: 6

Sixth Grade Keyboarding is a 9-week course designed to learn the "touch" system of keyboarding. The primary emphasis is learning correct keystroking using proper technique on a microcomputer through the use of a word processing program.

7TH GRADE KEYBOARDING

Length: 9 weeks (1 quarter)
Prerequisites: None
Grade Level: 7

Seventh Grade Keyboarding is a 9-week course designed to review and enhance the skills used in the "touch" system of keyboarding. The primary emphasis is on improvement of speed and accuracy utilizing correct keystroking technique on a microcomputer through the use of a word processing program.

8TH GRADE KEYBOARDING

Length: 18 weeks (1 semester)
Prerequisites: None
Grade Level: 8

Eighth Grade Keyboarding is a one-semester course designed to develop a personal use level of skill in keyboarding. The emphasis will be on increasing speed and accuracy through the production of documents commonly prepared by students. Examples may include reports, outlines, and letters. The skills developed in Eighth Grade Keyboarding are a prerequisite for computer and other courses at the high school level.

AREA HIGH SCHOOLS

(All Business Education courses offered at the area high schools are one-semester courses unless otherwise stated.)

EXPLORING BUSINESS (One-half unit of credit for each semester)

Prerequisite: None.

Grade Level: 9. Exploring Business is a one-semester course that provides students an opportunity to explore the many careers available to them in the business and office arena. This exploration will involve a thorough analysis of the skills, habits, attitudes, and knowledge required for success in various occupations. Special emphasis will be given to developing each student's skill level in reading, writing, listening, speaking, thinking, and decision-making.

GENERAL BUSINESS (One-half unit of credit for each semester)

Prerequisite: None.

Grade Level: 9-10. This course includes such topics as banking, credit, insurance, investments, and consumerism. The student's general, business, and economic vocabulary will be strengthened; and the student's business and economic literacy will be expanded.

KEYBOARDING (One-half unit of credit for each semester)

Prerequisite: None

Grade Level: 9-10-11-12. Keyboarding is a one semester course designed to assist students who are beginning to develop a personal use level of skill. This course would be an appropriate selection for the student who has not successfully completed any previous keyboarding course. The skills developed in this course will provide a foundation for the development of employable skills.

ADVANCED KEYBOARDING (One-half unit of credit for each semester)

Prerequisite: Keyboarding or Instructor's Approval

Grade Level: 9-10-11-12. Advanced Keyboarding is a one-semester course designed to provide students with an opportunity to extend their typing skill to an employable level. The students will improve their typing skills and work habits. They will also enhance their production capabilities. Accuracy, endurance, and speed will be emphasized.

COMPUTER APPLICATIONS (One-half unit of credit for each semester)

Prerequisite: Keyboarding Skills

Computer Applications is a one semester course designed to assist students in developing a personal use level of skill in using a computer. Special emphasis will be given to word processing, database, and spreadsheet functions. Opportunity for extensive "hands-on" activity will be provided. Students will be expected to complete individual projects in each area of emphasis and at least one project involving the integration of all three functions.

BUSINESS MATH (One-half unit of credit for each semester)

Prerequisite: None.

Grade Level: 9-10-11-12. Business math involves the study of fundamental math concepts and the application of those concepts to specific business and personal use situations. The application helps develop an understanding of basic business and economic ideas such as pricing, discounting, taxation, budgeting, commissions, and interest. Special emphasis is given to skill development in mathematical operations. This course is an appropriate selection for a student wishing to upgrade their math skills for further study in math or business. It is also an excellent review or refresher course for twelfth graders planning to enter the job market. Business math will satisfy one semester of the math requirement.

ACCOUNTING 1 (One-half unit of credit for each semester)

Prerequisites: None.

Grade Level: 10-11-12. Accounting 1 is the first of four semesters of accounting offered in the Des Moines Public Schools. It is designed to provide students with an understanding of the purpose of the accounting function. It will also assist students in the development of a vocabulary and in the acquisition of skills necessary to perform the accounting function. The general understandings, the vocabulary, and skills obtained in Accounting 1 will help students understand some of the basic economic issues they must deal with everyday. It will also provide the basis for further study of accounting, economics, and business.

ACCOUNTING 2 (One-half unit of credit for each semester)

Prerequisite: Accounting 1.

Grade Level: 10-11-12. The second semester course is expanded to include more detailed methods of handling special accounting procedures such as payroll, data processing, and special journals. A simulation set with business papers for a retail business is completed.

ACCOUNTING 3 (One-half unit of credit for each semester)

Prerequisite: Accounting 2.

Grade Level: 11-12. This course is designed to provide skills and background for those preparing for specific business careers immediately after graduation or as a solid base for successful college-bound students in the business and accounting areas. Some of the accounting topics covered in this course are departmental accounting, payroll reports, control systems, and accounting systems for various forms of business ownership.

ACCOUNTING 4 (One-half unit of credit for each semester)

Prerequisite: Accounting 3.

Grade Level: 11-12. This is a finishing course for students interested in seeking business employment and/or building a good foundation in accounting for further education. Students apply their accounting knowledge through the use of advanced practice sets; they also continue work on automated data processing, corporation accounting, and cost accounting.

BUSINESS LAW (One-half unit of credit for each semester)

Prerequisite: None.

Grade Level: 11-12. Business Law is designed to acquaint students with the basic legal principles relevant to each individual in his or her personal life as well as in his or her occupation. This course will provide students with general understandings of the origin of our laws and how our legal system works. It will also provide an opportunity to develop a personal body of knowledge related to laws in the areas of contracts, consumerism, employment, discrimination, credit, and banking. Considerable emphasis will be placed on helping students recognize those situations that occur in life that require assistance from legal professionals.

WORD PROCESSING (One-half unit of credit for each semester)

Prerequisite: Computer Applications or consent of instructor

Grade Level: 10-11-12. Word Processing is an elective course in which students will utilize modern word processing techniques. Major emphasis will be given to the development of keyboarding skill and the use of an electronic word processing program. The course also includes the development of human relations, communication skills, time management, and decision-making skills necessary for success.

INFORMATION PROCESSING (One-half unit of credit for each semester)

Prerequisite: Computer Applications or consent of instructor

Grade Level: 10-11-12. Information Processing is an elective course in which students will utilize modern information processing techniques. Heavy emphasis will be given to the use of electronic data bases and spreadsheets. The course also stresses the importance of human relations and communication skills necessary for job success, the development of marketable skills using the most current procedures and technologies, and the application of time management and decision-making skills.

DESKTOP PUBLISHING (One-half unit of credit for each semester)

Prerequisite: Computer Applications or consent of instructor

Grade Level: 10-11-12. Desktop Publishing is an elective course which stresses the in-house preparation of documents, brochures, leaflets, and newspapers. Current procedures and technologies will be used while stressing the importance of communication skills. Individual and group projects will incorporate skills learned in the course. The students may complete projects appropriate for inclusion in their personal employment portfolios.

BUSINESS PROCEDURES (One-half unit of credit for each semester)

Prerequisite: Computer Applications or consent of instructor

Grade Level: 10-11-12. Business Procedures is an elective designed to prepare students for working in a modern automated office. The course stresses the importance of human relations, communication skills, current business procedures and technologies, time management and decision-making skills, and the development of marketable skills necessary for job success.

MARKETING/PRINCIPLES (One-half unit of credit for each semester)

Prerequisite: None

Grade Level: 11-12. This one semester course will provide a broad overview of the marketing process and the role that marketing plays in our lives. All the different marketing functions such as research, transportation, warehousing, advertising, promotion, pricing and selling will be studied with a heavy emphasis on occupational opportunities and requirements in each area.

MARKETING/RETAILING (One-half unit of credit for each semester)

Prerequisite: None

Grade Level: 11-12. Marketing - Retailing is a one semester course designed for 11th and 12th graders. The purpose of the course is to prepare students for employment or further education in the area of retail marketing. Specific topics studied will include site selection, store layout, display, promotion, advertising, pricing, discounting, warehousing, ordering, special sales, selling, and control of merchandise and receipts. Careers in retailing will also be investigated thoroughly.

MARKETING/SALES (One-half unit of credit for each semester)

Prerequisite: None

Grade Level: 11-12. This one semester course is part of a four semester sequence of marketing courses. The emphasis of this course will be on selling techniques and human relations skills needed by salespeople. All aspects of the selling process, from preparation to closing and follow-up, will be examined and practiced. Selling, as a career, will be investigated, and job seeking skills will be developed.

MARKETING/ENTREPRENEURSHIP (One-half unit of credit for each semester)

Prerequisite: None

Grade Level: 11-12. Marketing/Entrepreneurship is a one semester course that will introduce students to the factors that must be considered when starting and managing a business. The relationship of information gathering and decision making in business organization and management will be given emphasis in this course. Personal traits and characteristics of entrepreneurs and managers will be investigated and students will be encouraged to match their own traits and characteristics to those identified. The nature of risk and the role it and management plays in our economy will be studied. Management styles and philosophies will be discussed.

MARKETING EDUCATION CO-OP (One-half unit of credit for each semester)

Corequisite: Marketing Education Class.

Grade Level: 11-12. This is a paid-employment experience. Jobs are selected to offer students on-the-job training in retail, wholesale, or service establishments. Students are required to work a minimum of 15 hours per week to earn credit. They are supervised cooperatively by the teacher-coordinator and the employer.

NOTETAKING (One-half unit of credit for each semester)

Prerequisite: None

Grade Level: 11-12. Notetaking is a one semester course offered to grades 11 and 12. It will involve learning a simplified shorthand system that can be learned quickly. The course will also involve the development of notetaking skill which can be used personally, in the pursuit of further education, or vocationally. Study skills and organizational skills, as they relate to notetaking, will also be addressed.

SHORTHAND 1 (One-half unit of credit for each semester)

Prerequisite: Keyboarding skills

Grade Level: 11-12. This is an appropriate course for those students interested in a secretarial career. Students will learn the theory of the shorthand system. Attention is given to correct grammar usage, punctuation, spelling, and vocabulary improvement. A good English background is very essential for the student's success.

SHORTHAND 2 (One-half unit of credit for each semester)

Prerequisite: Shorthand 1

Grade Level: 11-12. Shorthand 2 is a continuation of Shorthand 1 with emphasis on further developing and strengthening the student's knowledge of shorthand theory. Emphasis is also placed on taking dictation and transcribing from notes.

OFFICE EDUCATION (One-half unit of credit for each semester)

Prerequisite: Approval of the Office Education Coordinator.

Grade Level: 11-12. Accounting, clerical, and stenographic students are enrolled in this course. Individualized and group instruction is provided to supplement and complement the student's learning on the job. Some of the topics covered are business skills improvement, human relations, personal grooming, personality development, career opportunities, money management, professional involvement, and job application and interview. Training is coordinated between the school and a business. Leadership training is gained through chapter (Business Professionals of America) activities and state and national leadership conferences via competitive events.

OFFICE EDUCATION CO-OP (One-half unit of credit for each semester)

Corequisite: Office Education Class.

Grade Level: 11-12. This is a paid-employment experience. Jobs are selected to offer students on-the-job training in local business or government offices. Students are required to work a minimum of 15 hours per week to earn credit as a regular class. They are supervised cooperatively by the teacher-coordinator and the employer.

APPLIED ECONOMICS (One-half unit of credit for each semester)

Prerequisite: None.

Grade Level: 11-12. Applied Economics involves an in-depth study of the American free enterprise system. It also involves relating and comparing our economic system to others in existence around the world. Current domestic and international economic issues will be examined. Each topic to be studied will be approached from an economic theory standpoint and also from an individual or personal use standpoint. The use of computer simulations, the formation and operation of a student company, and the presence of a business consultant one period each week, all contribute to making Applied Economics a unique economic learning experience. This course fulfills the economics requirement for graduation.

CENTRAL CAMPUS

ADVANCED COMPUTER APPLICATIONS (Central Campus) (One unit of credit/semester)
Prerequisite: Computer Applications

Grade Level: 11-12. Advanced Computer Technology 1 and Advanced Computer Technology 2 are each one semester in length and meet for 2 hours per day. The courses are designed for those students who have completed Computer Applications in the area high schools and who want to pursue the area of computer technology in more depth. Specific topics covered will include computer systems software, utilities, networking, communications, Hypercard, and other specific applications.

ACCOUNTING SPECIALIST (Central Campus) (Two years, six units of credit)

Prerequisite: Keyboarding Skills

Grade Level: 11-12. The Accounting Specialist program is a two year program for students considering a career in accounting. This includes those students who plan to continue the study of accounting at a post secondary institution. The program involves the study of accounting theory, ample practice in the application of accounting principles, and extensive study and practice in computerized accounting procedures. Other related business skills such as keyboarding, calculator operation, and oral and written communications are also incorporated into the program. Co-op work experience can also be arranged. Students who have completed the first year Accounting at another high school can enroll for the second year of this program.

EXECUTIVE SECRETARY (Central Campus) (Two years, six units of credit)

Prerequisite: Keyboarding skill.

Grade Level: 11-12. This is an opportunity for students to specialize. Students are being educated for the challenges and changes in the evolving electronic offices by using word processing, database, and spreadsheet software on computers. Students will develop skills in keyboarding, shorthand, dictation, transcription, oral and written communications, telephone procedures, spelling, grammar, vocabulary, punctuation, proofreading, editing, records management, calculating machines, machine transcription, telecommunications, and word/information processing along with business procedures.

Office Education employment may be available for qualified students. OE students work a minimum of 15 hours a week and earn credit as well as an hourly salary in an entry-level position in the area or related business areas. Students may participate in regional, state, and national activities of the vocational youth group, Business Professionals of America.

WORDPERFECT (Central Campus) (One year, two units of credit)

Prerequisite: Keyboarding skill.

Grade Level: 10-11-12. WordPerfect is a two-semester course designed to assist students in developing an employable level of skill using WordPerfect. Emphasis will be given to learning the features of WordPerfect in an MS-DOS environment. Time will also be devoted to the development of related skills such as keyboarding, writing, and proofreading. Special emphasis will be given to the touch method of keyboarding in both alphabetic and numeric (including 10-key pad) applications. Students will complete a variety of projects using the various data entry and word processing functions.

Appendix B

Course Title	Textbooks in Current Use	Use Period	Cost
Accounting 1 & 2	Century 21 Acctg, 1st Year Course, Chap 1-30	87-94	19.50
Accounting 3 & 4	Century 21 Acctg., Advanced Course	88-95	16.45
Accounting Specialist	101 Database Exercises	88-94	4.96
Accounting Specialist	101 Spreadsheet Exercises	88-94	5.16
Accounting Specialist	101 Word Processing Exercises	88-94	5.20
Accounting Specialist	Accounting Applications For Spreadsheets	88-94	13.50
Accounting Specialist	Acctg. Tutorial, A Transaction Analysis Approach	88-94	3.10
Accounting Specialist	Adv. Automated Acctg. For The Microcomputer	88-94	6.95
Accounting Specialist	Applications Using The Personal Computer	88-94	7.95
Accounting Specialist	Business Principles & Management	88-94	13.50
Accounting Specialist	Computerized Inventory Procedures	88-94	8.60
Accounting Specialist	Computerized Payroll Procedures	88-94	3.70
Accounting Specialist	Data Entry Activities For The Microcomputer	88-94	6.25
Accounting Specialist	Developing Proofreading Skill	88-94	4.38
Accounting Specialist	Microcomputer Activities For Office Procedures	88-94	5.55
Accounting Specialist	Microcomputer Simulations in Business	88-94	5.10
Accounting Specialist	Outfitters Electronics	88-94	2.85
Accounting Specialist	Skills For The Electronic World	88-94	4.75
Accounting Specialist	Spreadsheets, Skill Building Exercises & Applications	88-94	14.50
Accounting Specialist	Vocational Mathematics For Business	88-94	7.70
Applied Economics	Consumer Economics	88-95	18.95
Business Law	Understanding Business and Personal Law	90-97	17.34
Business Math	Applied Business Mathematics	92-99	28.00
Business Procedures	The Office: Procedures and Technology	88-99	15.20
Desktop Publishing	Desktop Publishing Using Pagemaker (Mac Version)	92-99	16.00
Desktop Publishing	Omega Desktop Inc.: A DTP Simulation	92-99	9.00
Exploring Business	Exploratory Business	88-96	7.86
General Business	Introduction To Business: The Economy And You	91-98	20.50
Information Processing	Microsoft Works, Tutorial & Application	92-99	12.50
Information Processing	Sails For Rent: An Info Mgtm Simulation	92-99	10.00
Keyboarding/Advanced Keyboarding	Century 21 Keybrdg, Format & Document Processing	92-99	25.00
Marketing/ Entrepreneurship	Business Principles And Management	90-97	16.65
Marketing/Principles	LAPS (Starter Package S)	90-97	2100.00
Marketing/Retailing	Retail Marketing: For Employees, Managers, and Entrepreneurs	90-97	15.60
Marketing/Sales	LAPS (Starter Package S)	90-97	2100.00

Notetaking	SpeedWriting For Notetaking And Study Skills Regency II	91-98	14.96
Shorthand I	Principles Of Speedwriting, Regency II	91-98	16.98
Shorthand II	Speedwriting-Dictation and Transcription, Regency II	91-98	21.99
Word Processing	Easy Rules: Captialization & Number Expression	92-99	5.50
Word Processing	Easy Rules: Spelling	92-99	5.00
Word Processing	Easy Rules: The Comma	92-99	5.00
Word Processing	Easy Rules: Word Choice	92-99	5.50
Word Processing	Microsoft Word On The Macintosh	92-99	13.00
WordPerfect	Advanced WordPerfect 5.0/5.1: Tutorial & Applications, Incld DTP	92-99	10.75
WordPerfect	Computer Application For Business	92-99	19.50
WordPerfect	WordPerfect 5.0/5.1: Tutorial & Applications, IBM Version	92-99	10.75

APPENDIX C--EQUIPMENT INVENTORY FOR BUSINESS EDUCATION

School	Typewriters	Computers	Printers	LCD	Transcription Stations	Copy Machines	Calculators
Alt. North	4	12	2				3
Alt. South	7	3	1				6
Central Campus	46	59	17	1	12		20
East	55	58	14	2	13		48
Hoover	36	25	5	1			
Lincoln	60	56	16	2	11	1	23
North	34	27	5	1			12
Roosevelt	32	19	6	1			15
Brody		26	6	1			
Callanan		25	5	1			
Goodrell		29	4	1			
Harding		25	4	1			
Hiatt		25	5	1			
Hoyt		25	4	1			
McCombs		25	5	1			
Meredith		30	4	1			
Merrill		24	4	1			
Weeks		25	5	1			

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AREA HIGH SCHOOL ENROLLMENT BY COURSE
1991-92 AND 1992-93

COURSE TITLE	Fall 1991	Spring 1992	Total 91-92	COURSE TITLE	Fall 1992
Accounting 1	338	67	405	Accounting 1	330
Accounting 2		253	253	Accounting 2	13
Accounting 3	60	22	82	Accounting 3	52
Accounting 4		27	27	Accounting 4	
Applied Economics	380	394	774	Applied Economics	329
Business Law	42	77	119	Business Law	49
Business Math	126	134	260	Business Math	104
Exploring Business	206	57	263	Exploring Business	155
General Business	45	139	184	General Business	98
Computer Applications	370	633	1003	Computer Applications	565
Intr. Computer Prog.	44	38	82		
Marketing/Principles				Marketing/Principles	74
Marketing/Retailing				Marketing/Retailing	15
Marketing/Sales	201	45	246	Marketing/Sales	85
Marketing/Entrepren		125	125	Marketing/Entrepren	
Marketing/Coop	106	93	199	Marketing/Coop	99
Notetaking	107	70	177	Notetaking	68
Office Education	36	31	67	Office Education	32
Office Education Coop	35	31	66	Office Education Coop	32
Office Procedures	66	42	108	Business Procedures	16
Shorthand 1	10		10	Shorthand 1	
Shorthand 2				Shorthand 2	
Typing 1	1117	574	1691	Keyboarding	1036
Typing 2	110	281	391	Advanced Keyboarding	114
Typing 3		14	14	Word Processing	91
Typing 4				Information Processing	32
Intensive Keyboarding	8	13	21	Desktop Publishing	31
TOTAL	3407	3160	6567		3420

EAST HIGH SCHOOL ENROLLMENT BY COURSE
1991-92 AND 1992-93

COURSE TITLE	Fall 1991	Spring 1992	Total 91-92	COURSE TITLE	Fall 1992
Accounting 1	67	35	102	Accounting 1	59
Accounting 2		24	24	Accounting 2	
Accounting 3	18		18	Accounting 3	7
Accounting 4		12	12	Accounting 4	
Applied Economics	173	122	295	Applied Economics	137
Business Law	18	15	33	Business Law	9
Business Math	52	53	105	Business Math	30
Exploring Business	78		78	Exploring Business	50
General Business	27	71	98	General Business	50
Computer Applications	104	134	238	Computer Applications	162
Marketing/Principles				Marketing/Principles	
Marketing/Retailing				Marketing/Retailing	
Marketing/Sales	74	45	119	Marketing/Sales	60
Marketing/Entrepren				Marketing/Entrepren	
Marketing/Coop				Marketing/Coop	
Notetaking	21	32	53	Notetaking	32
Office Education	22	19	41	Office Education	17
Office Education Coop	22	19	41	Office Education Coop	17
Office Procedures	20	21	41	Business Procedures	16
Shorthand 1	10		10	Shorthand 1	
Shorthand 2				Shorthand 2	
Typing 1	310	97	407	Keyboarding	232
Typing 2	47	100	147	Advanced Keyboarding	46
Typing 3		14	14	Word Processing	22
Typing 4				Information Processing	17
				Desktop Publishing	
Total	1063	813	1876		963

HOOVER HIGH SCHOOL ENROLLMENT BY COURSE
1991-92 AND 1992-93

COURSE TITLE	Fall 1991	Spring 1992	Total 91-92	COURSE TITLE	Fall 1992
Accounting 1	29		29	Accounting 1	53
Accounting 2		24	24	Accounting 2	
Accounting 3				Accounting 3	
Accounting 4				Accounting 4	
Applied Economics	24	51	75	Applied Economics	39
Business Law		15	15	Business Law	
Business Math				Business Math	
Exploring Business	28		28	Exploring Business	49
General Business		22	22	General Business	
Computer Applications	93	119	212	Computer Applications	91
Marketing/Principles				Marketing/Principles	
Marketing/Retailing				Marketing/Retailing	
Marketing/Sales				Marketing/Sales	
Marketing/Entrepren				Marketing/Entrepren	
Marketing/Coop				Marketing/Coop	
Notetaking				Notetaking	
Office Education				Office Education	
Office Education Coop				Office Education Coop	
Office Procedures				Business Procedures	
Shorthand 1				Shorthand 1	
Shorthand 2				Shorthand 2	
Typing 1	183	52	235	Keyboarding	150
Typing 2	24	46	70	Advanced Keyboarding	
Typing 3				Word Processing	16
Typing 4				Information Processing	
				Desktop Publishing	
TOTAL	381	329	710		398

LINCOLN HIGH SCHOOL ENROLLMENT BY COURSE
1991-92 AND 1992-93

COURSE TITLE	Fall 1991	Spring 1992	Total 91-92	COURSE TITLE	Fall 1992
Accounting 1	146		146	Accounting 1	125
Accounting 2		119	119	Accounting 2	
Accounting 3	19		19	Accounting 3	23
Accounting 4		15	15	Accounting 4	
Applied Economics	57	55	112	Applied Economics	54
Business Law	24	47	71	Business Law	40
Business Math	54	81	135	Business Math	49
Exploring Business	66	26	92	Exploring Business	39
General Business	18	46	64	General Business	48
Computer Applications	75	164	239	Computer Applications	131
Marketing/Principles				Marketing/Principles	74
Marketing/Retailing				Marketing/Retailing	
Marketing/Sales	80		80	Marketing/Sales	
Marketing/Entrepren		69	69	Marketing/Entrepren	
Marketing/Coop	80	69	149	Marketing/Coop	74
Notetaking	23		23	Notetaking	14
Office Education	14	12	26	Office Education	15
Office Education Coop	13	12	25	Office Education Coop	15
Office Procedures	16	21	37	Business Procedures	
Shorthand 1				Shorthand 1	
Shorthand 2				Shorthand 2	
Typing 1	268	169	437	Keyboarding	291
Typing 2	19	74	93	Advanced Keyboarding	26
Typing 3				Word Processing	39
Typing 4				Information Processing	
Intensive Keyboarding	8	13	21	Desktop Publishing	15
TOTAL	980	992	1972		1072

NORTH HIGH SCHOOL ENROLLMENT BY COURSE
1991-92 AND 1992-93

COURSE TITLE	Fall 1991	Spring 1992	Total 91-92	COURSE TITLE	Fall 1992
Accounting 1	47		47	Accounting 1	41
Accounting 2		47	47	Accounting 2	
Accounting 3				Accounting 3	
Accounting 4				Accounting 4	
Applied Economics	72	101	173	Applied Economics	47
Business Law				Business Law	
Business Math				Business Math	
Exploring Business	17	31	48	Exploring Business	17
General Business				General Business	
Computer Applications	58	118	176	Computer Applications	88
Marketing/Principles				Marketing/Principles	
Marketing/Retailing				Marketing/Retailing	
Marketing/Sales	26		26	Marketing/Sales	25
Marketing/Entrepren		24	24	Marketing/Entrepren	
Marketing/Coop	26	24	50	Marketing/Coop	25
Notetaking	20	16	36	Notetaking	7
Office Education				Office Education	
Office Education Coop				Office Education Coop	
Office Procedures	30		30	Business Procedures	
Shorthand 1				Shorthand 1	
Shorthand 2				Shorthand 2	
Typing 1	179	163	342	Keyboarding	167
Typing 2		20	20	Advanced Keyboarding	42
Typing 3				Word Processing	14
Typing 4				Information Processing	
				Desktop Publishing	
TOTAL	475	544	1019		473

ROOSEVELT HIGH SCHOOL ENROLLMENT BY COURSE
1991-92 AND 1992-93

COURSE TITLE	Fall 1991	Spring 1992	Total 91-92	COURSE TITLE	Fall 1992
Accounting 1	49	32	81	Accounting 1	52
Accounting 2		39	39	Accounting 2	13
Accounting 3	23	22	45	Accounting 3	22
Accounting 4				Accounting 4	
Applied Economics	54	65	119	Applied Economics	52
Business Law				Business Law	
Business Math	20		20	Business Math	25
Exploring Business	17		17	Exploring Business	
General Business				General Business	
Computer Applications	40	98	138	Computer Applications	93
Intr. Computer Prog.	44	38	82		
Marketing/Principles				Marketing/Principles	15
Marketing/Retailing				Marketing/Retailing	
Marketing/Sales	21		21	Marketing/Sales	
Marketing/Entrepren		32	32	Marketing/Entrepren	
Marketing/Coop				Marketing/Coop	
Notetaking	43	22	65	Notetaking	15
Office Education				Office Education	
Office Education Coop				Office Education Coop	
Office Procedures				Business Procedures	
Shorthand 1				Shorthand 1	
Shorthand 2				Shorthand 2	
Typing 1	177	93	270	Keyboarding	196
Typing 2	20	41	61	Advanced Keyboarding	
Typing 3				Word Processing	
Typing 4				Information Processing	15
				Desktop Publishing	16
TOTAL	508	482	990		514

BUSINESS EDUCATION ENROLLMENT

	TOTAL ENR 90-91	CHANGE 90,91-91,92	TOTAL ENR 91-92	% CHANGE
Accounting 1	296	109	405	36.82%
Accounting 2	185	68	253	36.76%
Accounting 3	97	-15	82	-15.46%
Accounting 4	35	-8	27	-22.86%
Subtotal	613	154	767	25.12%
Applied Economics	690	84	774	12.17%
Business Law	119	0	119	0.00%
Business Math	270	-10	260	-3.70%
Exploring Business	124	139	263	112.10%
General Business	161	23	184	14.29%
Subtotal	1364	236	1600	17.30%
Computer Applications	703	300	1003	**42.67%**
Intr. Computer Prog.	128	-46	82	-35.94%
Subtotal	831	254	1085	30.57%
Marketing/Principles	150	-150		
Marketing/Retailing	105	-105		
Marketing/Sales		246	246	
Marketing/Entrepren		125	125	
Marketing/Coop	176	23	199	13.07%
Subtotal	431	139	570	**32.25%**
Notetaking	29	148	177	**510.34%**
Office Education	80	-13	67	-16.25%
Office Education Coop	78	-12	66	-15.38%
Office Procedures	133	-25	108	-18.80%
Subtotal	320	98	418	30.63%
Shorthand 1	16	-6	10	-37.50%
Shorthand 2	7	-7		-100.00%
Shorthand 3		0		
Shorthand 4		0		
Subtotal	23	-13	10	-56.52%
Typing 1	1270	421	1691	33.15%
Typing 2	298	93	391	31.21%
Typing 3	26	-12	14	-46.15%
Typing 4		0		
Intensive Keyboarding		21	21	
Subtotal	1594	523	2117	**32.81%**
TOTAL	5176	1391	6567	**26.87%**

	BUSINESS EDUCATION ENROLLMENT TRENDS IN AREA HIGH SCHOOLS								
	TOTAL ENR	CHANGE	TOTAL ENR	CHANGE	TOTAL ENR	CHANGE	TOTAL ENR	CHANGE	TOTAL ENR
	87-88	87,88-88-89	88-89	88,89-89-90	89-90	89,90-90,91	90-91	90,91-91,92	91-92
Accounting 1	615	-92	523	-97	426	-130	296	109	405
Accounting 2	454	-99	355	-86	269	-84	185	68	253
Accounting 3	166	-32	134	-31	103	-6	97	-15	82
Accounting 4	113	-35	78	-25	53	-18	35	-8	27
								0	
Applied Economics	673	166	839	-134	705	-15	690	84	774
Business Law	303	-69	234	-89	145	-26	119	0	119
Business Math	488	-26	462	-116	346	-76	270	-10	260
Exploring Business	276	-36	240	-39	201	-77	124	139	263
General Business	294	-43	251	-75	176	-15	161	23	184
Computer Applications	114	70	184	181	365	338	703	300	1003
Intr. Computer Prog.	486	-2	484	-167	317	-189	128	-46	82
								0	
Marketing/Principles	194	21	215	-4	211		150	-150	
Marketing/Retailing							105	-105	
Marketing/Sales								246	246
Marketing/Entrepren								125	125
Marketing/Coop	194	21	215	-4	211	-35	176	23	199
Sales	164	12	176	-66	110			0	
								0	
Notetaking	49	1	50	13	63	-34	29	148	177
Office Education	110	-12	98	-34	64	16	80	-13	67
Office Education Coop	108	-9	99	-29	70	8	78	-12	66
Office Procedures	139	8	147	-5	142	-9	133	-25	108
								0	
Shorthand 1	101	-40	61	-31	30	-14	16	-6	10
Shorthand 2	24	-21	3	8	11	-4	7	-7	
Shorthand 3	12	9	21	-16	5	-5		0	
Shorthand 4				11	11	-11		0	
								0	
Typing 1	1468	-171	1297	-127	1170	100	1270	421	1691
Typing 2	489	-113	376	-38	338	-40	298	93	391
Typing 3	104	-48	56	4	60	-34	26	-12	14
Typing 4	38	-11	27	-12	15	-15		0	
Intensive Keyboarding						0		21	21
Typing Keyboarding				21	21	-21		0	
TOTAL	7178	-551	6625	-987	5638	-462	5176	1391	6567